

What is claimed is:

1. An ink jet printer comprising:

an image forming section for forming an image by ejecting a pigment ink toward a recording medium in which a surficial layer includes thermoplastic fine particles, in a case;

a fixing member for fixing the image by heating and pressurizing the recording medium on which the image is formed by the image forming section;

a drying member for drying the ink used for forming the image before the image is fixed to the recording medium by the fixing member;

a temperature detecting member for detecting a temperature in the case;

a humidity detecting member for detecting a humidity in the case; and

a drying member control section for controlling an operation of the drying member in accordance with the temperature detected by the temperature detecting member and the humidity detected by the humidity detecting member.

2. The ink jet printer of claim 1, further comprising:

a temperature judging section for judging whether the temperature detected by the temperature detecting member is not less than a first predetermined value; and

a humidity judging section for judging whether the humidity detected by the humidity detecting member is not less than a second

predetermined value;

wherein the drying member control section operates the drying member when the temperature judging section judges that the temperature detected by the temperature detecting member is not less than the first predetermined value and the humidity judging section judges that the humidity detected by the humidity detecting member is not less than the second predetermined value.

3. The ink jet printer of claim 2, wherein the drying member comprises an air blowing member for blowing air to the recording medium, and a heating member for heating the recording medium; and

the drying member control section controls at least one of air blow carried out by the air blowing member and heating carried out by the heating member.

4. The ink jet printer of claim 1, further comprising:
a vapor volume calculating section for calculating a vapor volume per unit volume of air in the case in accordance with the temperature detected by the temperature detecting member and the humidity detected by the humidity detecting member; and

a vapor volume judging section for judging whether the vapor volume calculated by the vapor volume calculating section is not less than a third predetermined value;

wherein the drying member control section operates the drying member when the vapor volume judging section judges that

the vapor volume calculated by the vapor volume calculating section is not less than the third predetermined value.

5. The ink jet printer of claim 4, wherein the drying member comprises an air blowing member for blowing air to the recording medium, and a heating member for heating the recording medium; and

the drying member control section controls at least one of air blow carried out by the air blowing member and heating carried out by the heating member.

6. The ink jet printer of claim 1, further comprising:
a heating control section for controlling heating of the recording medium, which is carried out by the fixing member;

wherein the heating control section controls the heating carried out by the fixing member in accordance with an operation condition of the drying member controlled by the drying member control section.

7. The ink jet printer of claim 6, wherein the drying member comprises a heating member for heating the recording medium,

the drying member control section controls heating carried out by the heating member; and

the heating control section controls the heating carried out by the fixing member in accordance with a heating condition

of the heating member controlled by the drying member control section.

8. The ink jet printer of claim 1, further comprising:
an ink volume calculating section for calculating volume of the ink ejected to a predetermined unit area of the recording medium when the image is formed by the image forming section; and

an ink volume judging section for judging whether the volume of the ink, which is calculated by the ink volume calculating section is not less than a fourth predetermined value;

wherein the drying member control section operates the drying member when it is judged by the ink volume judging section that the volume of the ink is not less than the fourth predetermined value.

9. The ink jet printer of claim 1, wherein the drying member dries the ink of the image formed on the recording medium so that the image has a C value of not less than 80 by fixing the image with the fixing member.

10. An ink jet printer comprising:
an image forming section for forming an image by ejecting a pigment ink toward a recording medium in which a surficial layer includes thermoplastic fine particles, in a case;

a fixing member for fixing the image by heating and pressurizing the recording medium on which the image is formed

by the image forming section;

a combination deciding section for deciding a combination of a plurality of inks used for forming the image by the image forming section;

a temperature detecting member for detecting a temperature in the case;

a humidity detecting member for detecting a humidity in the case; and

an ink volume adjusting section for adjusting volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed by the image forming section, by changing the combination of the plurality of inks, which is decided by the combination deciding section, in accordance with the temperature detected by the temperature detecting member and the humidity detected by the humidity detecting member so that the volume of the inks is not less than a first predetermined value.

11. The ink jet printer of claim 10, further comprising:

a temperature judging section for judging whether the temperature detected by the temperature detecting member is not less than a second predetermined value; and

a humidity judging section for judging whether the humidity detected by the humidity detecting member is not less than a third predetermined value;

wherein the ink volume adjusting section adjusts the volume of the inks when the temperature judging section judges that the

temperature detected by the temperature detecting member is not less than the second predetermined value and the humidity judging section judges that the humidity detected by the humidity detecting member is not less than the third predetermined value.

12. The ink jet printer of claim 10, wherein the image forming section forms a color image; and

the ink volume adjusting section is configured so as to adjust the volume of the inks by removing undercolor to change the combination of the plurality of the inks, which is decided by the combination deciding section, when the color image is formed by the image forming section.

13. The ink jet printer of claim 10, wherein the image forming section forms the image by ejecting inks having different densities from each other; and

the ink volume adjusting section is configured so as to adjust the volume of the inks by changing the combination of the plurality of the inks, which is decided by the combination deciding section, so that a ratio of a dense ink is large.

14. An ink jet printer comprising:

an image forming section for forming an image by ejecting a pigment ink toward a recording medium in which a surficial layer includes thermoplastic fine particles, in a case;

a fixing member for fixing the image by heating and

pressurizing the recording medium on which the image is formed by the image forming section;

a temperature detecting member for detecting a temperature in the case;

a humidity detecting member for detecting a humidity in the case; and

a combination deciding section for deciding a combination of a plurality of inks used for forming the image by the image forming section in accordance with the temperature detected by the temperature detecting member and the humidity detected by the humidity detecting member so that volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed by the image forming section is not less than a predetermined value.

15. The ink jet printer of claim 14, wherein the combination deciding section decides the combination of the plurality of inks for forming the color image with the image forming section by removing undercolor.

16. The ink jet printer of claim 14, wherein the image forming section forms the image by ejecting inks having different densities from each other; and

the combination deciding section decides the combination of the plurality of inks so that a ratio of a dense ink is large.

17. An image recording method using an ink jet printer, comprising steps of:

forming an image by ejecting a pigment ink toward a recording medium in which a surficial layer includes thermoplastic fine particles;

fixing the image to the recording medium by heating and pressurizing the recording medium; and

adjusting an amount of dryness of the ink used for forming the image after the forming step and before the fixing step, in accordance with a temperature and a humidity in the ink jet printer.

18. An image recording method using an ink jet printer, comprising steps of:

forming an image by ejecting a pigment ink toward a recording medium in which a surficial layer includes thermoplastic fine particles;

deciding a combination of a plurality of inks used for forming the image in the forming step;

adjusting volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed, by changing the combination of the plurality of inks, which is decided in the deciding step, in accordance with a temperature and a humidity in the ink jet printer so that the volume of the inks is not less than a predetermined value; and

fixing the image to the recording medium by heating and

pressurizing the recording medium.

19. An image recording method using an ink jet printer, comprising steps of:

forming an image by ejecting a pigment ink toward a recording medium in which a surficial layer includes thermoplastic fine particles;

deciding a combination of a plurality of inks used for forming the image in accordance with a temperature and a humidity in the ink jet printer so that volume of the inks ejected to a predetermined unit area of the recording medium when the image is formed in the forming step, is not less than a predetermined value; and

fixing the image to the recording medium by heating and pressurizing the recording medium.